THE GENESEE FARMER.

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THE GENESEE FARMER.

FOURTH VOLUME.

Published by LUTHER TUCKER & Co., *Rochester.*

TO THE PUBLIC.

The commencement of the Fourth Volume presents an opportunity which the publishers gladly improve for acknowledging the favor widely and warmly extended to the "*Genesee Farmer.*" The frequent abortive efforts to establish agricultural prints in this country, rendered some of our best friends doubtful of the success of our undertaking. It is therefore peculiarly satisfactory to be able to announce, that the difficulties inseparable from the establishment of such works have in this case been encountered with a degree of SUCCESS which STIMULATES US TO INCREASED EXERTION while it INSURES THE PERMANENCE OF THE PUBLICATION.

The general opinion respecting the "*Genesee Farmer,*" may be inferred from the concurrent testimony of the principal Agricultural prints and newspapers throughout the United States and the Canadian Provinces. No similar publication has ever received attention more fervent or flattering from its contemporaries. Still more substantial testimony of public approbation is afforded by the fact that, *after deducting all stoppages*, the subscription list presents an INCREASE of between FOUR and FIVE HUNDRED during the PAST YEAR. This large addition is rendered still more satisfactory from the circumstance that it includes many of the most distinguished Agriculturists and Horticulturists of which this State or any other State can boast.

The readers of the "Genesee Farmer," especially for the last year, will doubtless cordially participate in the satisfaction with which we announce that Judge BUEL of Albany, President of the State Agricultural Society, will continue his contributions; for we presume it is generally conceded that no man is better qualified to communicate to his agricultural brethren information on pursuits wherein he has proven himself so eminently successful. Assurances of assistance, as heretofore, in the Editorial Department, have also been received from —— ——, who was for several years President of the Agricultural Society in Cayuga county, and whose scientific and practical knowledge of the subjects to which the Farmer is devoted, qualifies him in an eminent degree to impart interest and instruction to its pages. Many of his communications as a correspondent, are well known. With such valuable aid—with so many correspondents as have enriched our columns heretofore—and with other arrangements which we have made for imparting value to the publication—we feel justified in asserting that the "Genesee Farmer" will prove itself not unworthy the high praise which has been awarded.

It may be here noted, that the largely increasing circulation of the "Farmer" is attributable in a great measure to the disinterested exertions of patriotic men throughout the country, who feel the importance of disseminating the information by which they have rendered FARMING so pleasant and profitable to themselves. It is a significant "sign," that among the patrons of agricultural prints, few are included whose skill in farming has not proven their ability to judge correctly of the value of such works. With all the immense improvements of the last fifty years in Agriculture and its kindred sciences, much, very much, remains to be done. The farmer who contents himself with following the beaten track of husbandry as practiced a half-century back, instead of improving himself and his dependants by the discoveries of Modern Science, gives practical evidence of his own inability to comprehend the causes which can dignify Agricultural pursuits and render them conducive alike to private prosperity and national greatness.

The *expense* of the work cannot form any serious barrier to its general circulation; for no publication in the Union affords a greater supply of information at such a low price. And where is the cultivator, however small his premises, who will gravely excuse himself from subscribing on the score of *poverty*, when the cost falls short of four cents a week? And how, if he ever wishes to recreate himself by reading after his labors, or to offer any facilities to his family for the acquisition of knowledge connected with his and their daily avocations—how can he procure so much valuable information, on such a great variety of interesting topics, for such a paltry sum?

As for the *value* of the work—experience is the best test:—and those Farmers who earnestly desire (as who does not?) to better their own condition, while they contribute to the improvement of society, can testify the sincerity of their wishes for the attainment of both objects by encouraging, as far as their own example can do, the circulation of such papers in their neighborhoods.

CONDITIONS.—The Genesee Farmer is published every Saturday, in quarto form, suitable for Binding, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00, if payment is made at the time of subscribing.

☞ The publication of the Fourth Volume commences with the year 1834, and all subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

☞ New subscribers can be supplied with the first, second and third volumes.

LUTHER TUCKER & Co.

Rochester, Jan. 1834.

☞ Editors with whom we exchange, are requested to copy the above.

DAN BRADLEY, Esq.—We invite attention to the Address of this gentleman, which may be found on another page of this paper. We would also tender our grateful acknowledgments to Mr. BRADLEY for his efforts in behalf of the Genesee Farmer, and for the many valuable communications which he has furnished us since its commencement.

AGRICULTURAL ADDRESS.—We are indebted to the Hon. DANIEL WARDWELL for a copy of his Address delivered at the last annual Cattle Show and Fair of the Jefferson County Agricultural Society, which we shall take pleasure in transferring to our pages as soon as we can make room for it.

Economy of Fuel.

This is a favorable season of the year for procuring fire-wood; and we would remind our subscribers of the advantage of "taking time by the foretop" in this business. The difference between using it green or dry, we apprehend is much greater than housekeepers have generally considered or understood. From page 61 of our last volume, it may be shown* by a fair estimate that the loss of heat in burning one cord of green wood is more than sufficient to heat fifteen (English) hogsheads of water from the freezing to the boiling points; but if we take the wood from the open air when the mercury stands at zero, the loss will be considerably greater.

We know not that any experiment has been made to ascertain the quantity of water that may be evaporated with one pound of dry wood; but we shall keep within reasonable bounds if we put the loss of fuel at one half: that is half a cord of dry wood is worth for immediate use, a whole cord of green wood. We know that some kinds of *undried* wood when first brought in and thrown on the fire in cold weather, will hardly give out more heat than is necessary to consume it. This is particularly the case with old wood in the incipient stages of decay; yet such wood when *thoroughly* dried is often a profitable fuel.

We assume that a cord of green wood produces during combustion, as much heat as a cord of the same kind when kiln-dried; but the degrees of intensity will be wide apart. As the green wood is consumed, a large portion of the heat unites with the moisture and passes off at a temperature that is scarcely above boiling. If this vapor passes up the pipe of a stove, all that part which comes in contact with the *cold* iron is condensed, falling back, and showing that the heat has barely strength enough to carry off the water; and consequently cannot assist in warming the room without dropping its load. It is the *surplus heat* from below that commonly heats the the pipe.

It has been said there is no cheaper wood than dry rails. We are far from recommending to farmers however, to burn up their fences, though we think the *loss* occasioned by burning rails of *some* kinds may be not much greater than to burn green wood; and our advice to them is, to let their fuel become as dry as old rails. Independent of the actual saving in the quantity, it is much more pleasant to kindle fires, and *one third lighter* to handle or to haul. Those who purchase for immediate use, will do well to give more for dry wood by the cord; and when prepared for the future, they will make a great saving by using none but what has been dried through one summer, so long as money may be had on interest at seven per cent.

Wood dried in the open air however, still contains much moisture. This is evident from the fact that it must be kiln-dried before it is used to the best advantage in the manufacture of glass; and although cooking requires a heat far less intense, yet a great saving in quantity may be

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* In that article, the calculation was not carried out: the moisture in burning wood has to be BOTH *heated* and *evaporated.*

made by using that of a better quality. It must therefore be evident that seasoned wood under shelter is worth more than wood that is exposed to the weather. If cut in the winter or spring, and piled up, it should not stand out longer than the close of summer, but be taken in when it is very dry. Hence the value of a wood-house.

Culture of Barley.

Barley, like Hops, is annually becoming of increased importance in our agriculture. We are told that more than two-thirds of the barley raised in the United States is the produce of this state, and that this is almost wholly grown in the northern and western parts. The quantity marketed at Albany and its neighborhood, in 1833, is stated at 450,000 bushels. This, estimated at seventy-five cents a bushel, makes an aggregate of 337,500 dollars.

A lack of information in regard to this grain, seems to be prevalent, by which a serious loss is sustained by the farmer, which it is the object of this article in some measure to remedy. There are two varieties of barley grown, one two, and the other six rowed, which will not malt profitably together. The brewer cannot, therefore, afford to pay so high for these when mixed as he can for either sort separate. One has a thick, the other a thin skin. The first requires a longer time in the process of malting than the latter; and of course, when mixed, the thin skinned is overdone, and materially injured, or the process must be terminated ere the thick skinned has developed all its saccharine matter. Where the brewer buys directly of the farmer, he is in a measure enabled to prevent this mixture, by keeping each sort separate; though the farmer himself, not being aware of the consequence, is not sufficiently careful to keep the kinds distinct. But when the grain is bought in by the merchant, or goes to market in a canal boat, an indiscriminate mixture takes place, and the value becomes sensibly diminished. The loss in this way last year is stated at ten per cent. upon the whole product, or equal to 45,000 bushels.

We hope these hints will serve to induce the farmer to sow only clean seed of one variety, and the merchant and boatmen to consult their interest, by keeping the two kinds separate.

Although wheat is, and is likely to remain the great staple of the west, yet there are many of the lighter soils suited to the profitable culture of barley. We will therefore make some suggestions as to its culture, which may benefit those who are not already familiar with it. The two rowed, which is thin skinned, we believe is the most esteemed variety. The best seed for sowing is that which is free from blackness at the tail, and is of a pale lively yellow color, intermixed with a bright whitish cast; and if the rind be a little shriveled it is so much the better, as it shows that it has sweated in the mow, and is a sure indication that its coat is thin. The seed for strong land should be grown on a light or warm soil, as it will ripen some days earlier, and has the thinnest skin; and the seed for light should come from strong land, otherwise it degenerates in bulk and fullness. A change of seed is more important in this than in most other grain.

Barley produces best upon a light rich loam; and is neither adapted to a light sand nor a stiff clay—it does better upon corn than wheat soils. It may be sown upon a clover ley, or after a hoed crop, which has been well manured; but recent manure should by no means be applied to the barley, as it induces a rank growth, and causes the grain to lodge. When the plants are three or four inches out of the ground the roller may be passed over the field with great advantage. By often burying the crown it causes the grain to tiller, or multiply its seed stalks, and causes a beneficial compactness to the soil. It should be sown upon the fresh ploughed soil, and well harrowed in. Grass seeds may be sown with this crop to advantage. The product is from 20 to 70 bushels per acre, according to the fitness of the soil, its fertility and the favorableness of the season. B.

Erroneous Opinions.

The errors of great men are sometimes mischievous. Tennant, a long time ago, discovered that magnesian lime stone was hurtful to lands, as an agricultural application. His opinion has been adopted by almost every philosopher in Europe down to the present day. But the Pennsylvanians, on analyzing the lime which has for many years fertilized their lands, have found, that the magnesian lime stone is the most beneficial. The difference in effect may be owing to the difference in the quantity applied. In Great Britain they dress an acre with from two to four hundred bushels; in Pennsylvania from 50 to 70 bushels suffice. Davy has made the nutritive matter of the potatoe quintuple that afforded by the turnep; and hence it has been inferred, that one bushel of the former is equal to five of the latter for fattening cattle. Here, emphatically, "the proof of the pudding is in the *eating*." Repeated experiments have demonstrated, that the Swedish turnep will go as far, bushel for bushel, in fattening a bullock, as potatoes.—The product of the Swede is double that of the potatoe (excepting *this year*, in the experiment of O. P. Q. of Bloomfield)—and it is cultivated and harvested with half the expense that is bestowed upon the latter. The difference in the expense of fattening upon the two roots is at least one half in favor of the turnep.

Fruit Gardens.

To provide a full and regular supply of fruit for a family, more trees of the *earlier* and of the *later* varieties must be planted, because there are fewer of these varieties. We may be better understood by giving an example. If we examine a catalogue of PEACH TREES, we find that nine tenths of them ripen in the course of two months; and yet our season for peaches, embraces more than three months. It will then appear that more than one tree of each kind that ripens within the two months, may be inadmissible, if many of the best sorts are selected,—while of the *Early Anne* and of the *Heath*, more trees than one will be wanted.

A fruit garden fiften rods square may contain about one hundred and fifty trees. By extending the rule that we have just laid down, to other kinds, we shall find that we want more trees and more sorts of PEARS than of any other fruit, on account of their continuing to ripen through nine months of the year. Apples are so common on almost every farm, and so cheap in the markets in autumn and winter, that we would only include in the FRUIT GARDEN, some of the earlier kinds, most in danger of being plundered in the open orchard.

To give some idea of what a FRUIT GARDEN of these dimensions ought to contain, we exhibit the following list; subject however, to the alteration of every proprietor, as his taste, views of profit, or the facility or difficulty of procuring particular varieties may require; and if our number of trees, be too many or too few, let the bounds be enlarged or contracted accordingly.

20	trees or kinds of	Cherries.
40	do.	Pears.
15	do.	Plums.
10	do.	Apricots.
20	do.	Quinces.
25	do.	Peaches.
10	do.	Nectarines.
10	do.	Early Apples.

We will only stop to comment on the first item of this list. In *Lindley's Guide to the Orchard and Fruit Garden*, there is a selection of cherries, "for a *small* garden" containing FOURTEEN kinds and several of our favorites are excluded. We could readily name SIX more sorts which we would be unwilling to relinquish.

Mechanics make the best Farmers.

We have heard it said that mechanics make the best farmers; and the reasons assigned are,—

1. That they are accustomed to devote more hours to labor; and

2. That they acquire a better stock of general knowledge,—than farmers do. And

3. That they adopt ultimately the best system of practice.

Mechanics generally labor 12 to 14 hours in a day, at all seasons, in all weathers, and always have something to do. Farmers seldom labor in winter evenings, though they might read; and with many every wet day is an idle day; and they are withal more prone to idle their time in gossiping and public shows.

The mechanic is generally more given to reading than the farmer, and has better opportunities, particularly in towns and villages, for improving his mind in this way, as well as by intercourse with others. "Knowledge is power" in labor as well as in politics. It assists the hands as well as the head.

The mechanic possesses the best requisites for improvement. He is conscious when he turns farmer, that he has every thing to learn, and he sets about it in earnest. He reads, observes, thinks and compares. He is wedded to no system, in his new business, and has no prejudices or habits to combat or surmount; and if he is a man of sense, he generally selects the best, or the best parts of many systems. As all must be experiment with him, he multiplies these till he obtains satisfactory results. While on the other hand, the farmer is not always conscious that there is *any thing more to be learnt*. He has been *brought up on a farm*, which settles all doubts as to his qualifications, and silences all demands for knowledge. He is trammeled with the customs of his ancestors, too often bad, and takes no cognizance of the march of improvement. While the last is stationary, or retrogades, the former is progressing in knowledge and in wealth.

Indifference of Farmers to their own interests.

The following is an extract from a letter, dated Maple Grove, Butternuts, Otsego County, Dec. 17, 1833. The difficulties which the writer has met with, in obtaining subscribers to the Farmer are by no means confined to that part of our country. Similar difficulties exist, we believe, in almost every section; and it is to the persevering efforts of those who duly appreciate the importance of Agricultural Journals, alone, that the Genesee Farmer owes its existence; and we hope the measure of success which has attended their efforts, will induce them to persevere until it shall obtain a general circulation among our farmers:

"The indifference to reading, and almost contempt for what others write, which is so generally felt by the practical farmer, is, I am persuaded, a great hindrance to the advancement of agriculture, both in science and *practice*. This has made me very desirous to introduce your paper to my neighbors, with what poor success you too well know. I think with the exception of Dr. Y**** and the two names lately forwarded, it is not taken by a single individual within twenty miles of me. In truth I should have a better opinion of their desire for information if they would *borrow science;* but no—they will ask for every paper rather than that which really concerns them. In the village is a small library belonging to subscribers, most of whom are Farmers. I one day presented the Librarian with a five dollar note to purchase the first vol. of the Genesee Farmer, and to pay for the then current vol.—The money remained in his hands, I should think six months—and no paper ordered!—on which I reclaimed my money; and they were left without the most valuable publication their little library would have contained. I still have hopes however, that their attention will be drawn to the advantage of reading, and I shall yet see the Genesee Farmer dispersed over the county."

To Correspondents.

We acknowledge with much gratitude, the receipt of a number of communications during the past week, mostly from those to whom we have heretofore been so deeply indebted for similar favors, which will be published as soon as our limits will permit. Among the number is one from "*A Subscriber*," who says it is his first attempt at writing for publication. Having "broken the ice," we hope he will employ many of his winter evenings in relating his farming experience for the benefit of the readers of this paper. We venture to say that there are among our subscribers at least two hundred persons who have never written a line for the Farmer, who might furnish us with communications which would increase its interest and reputation. But they have not been in the habit of writing for the press. No matter for that. It is time for them to begin; and who among our readers cannot tell us his method of cultivating Wheat, Rye, Barley, Oats, Buckwheat, Peas, Beans, Corn, Potatoes, Flax, Ruta Baga, Mangel Wurtzel, or any other crop which he cultivates?—But perhaps those to whom we appeal for aid will say that they have no new method—that they do just as their neighbors do. That may all be true and their practices still afford instruction to those in other sections of the country. And while we solicit the continued favors of those who have heretofore contributed so liberally, we would urge those who have added nothing to the fund of information contained in the Farmer to come forward to our aid, by furnishing us with communications for the Farmer.

The Culture of Hops

Is becoming an important branch of husbandry in some districts of our state; and we are assured by a gentleman familiar with foreign hops, that as fine samples have been grown in Otsego and Madison as in any part of the world. The hop is considered somewhat precarious; but when the season is good, the profit is very great. The average product may be stated at 700 lbs. though it has reached 1600 lbs. the acre; and in the latter case the expense amounted to 60 dollars. The ordinary or average price may be stated at 18 cents the pound. The profits on an ordinary crop, according to these assumed data, would be about 70 dollars from the acre. It often falls materially short of this, however, from the want of knowledge and care in gathering and drying the crop.

The quantity of Hops taken to Albany and the neighboring towns on the Hudson, this year, has been estimated at 2300 bales, or 500,000 lbs. which, had not many of them been prematurely gathered, or badly cured, would have yielded to the growers ninety or a hundred thousand dollars. But of the 2300 bales, there were not more than 200 bales, we are advised, that ought to have received the denomination of *first sorts*. Many of them were picked too early, before the matter that imparts to them their value was sufficiently developed; and others were scorched or smoked in curing. This carelessness has seriously affected the character of our hops abroad, and they are no longer purchased by the Philadelphia brewers. They would soon form an important article of export, if their character was raised by care in their culture and drying, and a rigid inspection.

We are promised a communication on this subject, from a gentleman who has been long familiar with the culture of hops, and with its use, and who is consequently a good judge of their quality. It the mean time, as the defects in our crop have originated principally from errors in picking and curing, we extract Loudon's directions upon these points, from his Encyclopædia of Agriculture:

"*Taking the crop* is a most important operation in the hop economy. Hops are known to be ready for pulling when they acquire a strong scent, and the seeds become firm and of a brown color, which, in ordinary seasons, happens (in England) in the first and second weeks in September; and when the pulling season arrives, the utmost assiduity is requisite on the part of the planter, in order that the different operations may be carried on with regularity and dispatch; as the least neglect, in any part of the business, proves in a great degree ruinous to the most abundant crop, especially in precarious seasons. Gales of wind at that season, by breaking the lateral branches, and bruising the hops, prove nearly as injurious as a long continuance of rainy weather, which never fails to spoil the color of the crop, and thereby render it less saleable.

"*As a preparation for pulling the hops*, frames of wood, in numbers proportioned to the size of the ground, and the pickers to be employed, are placed in that part of the field which, by having been most exposed to the influence of the sun, is soonest ready. These frames, which are called *bins*, or *cribs*, are very simple in their construction, being only four pieces of boards nailed to four posts or legs, and, when finished, are about seven or eight feet long, three feet broad, and about the same hight. A man always attends the pickers, whose business is to cut over the vines near the ground, and to lay the poles on the frames to be picked. Commonly two, but seldom more than three poles are laid on at a time. Six, seven and eight pickers, women, girls and boys, are employed at the same frame, three or four being ranged on a side. These, with the man who sorts the poles, are called a set. The hops, after being carefully separated from the leaves and branches, or stocks, are dropped by the pickers into a large cloth, hung all round within side the frame on tenter hooks. When the cloth is full, the hops are emptied into a large sack, which is carried home, and the hops are laid on a kiln to be dried. This is always done as soon as possible after they are picked, as they are apt to sustain considerable damage, both in color and flavor, if allowed to remain long in sacks in the green state in which they are pulled. In very warm weather, and where they are pulled in a moist state, they will often heat in five or six hours: for this reason the kilns are kept constantly at work, both night and day, from the commencement to the conclusion of the hop picking season.

The operation of drying hops is not materially different from that of drying malt, and the kilns are of the same construction. The hops are spread on a hair cloth, and from eight to ten, and sometimes twelve, inches deep, according as the weather is dry or wet; and depending also on the state of the hops in regard to ripeness. A thorough knowledge of the best method of drying hops can only be obtained by a long practice. The general rules are to begin with a slow fire, and to increase it gradually, till, by the heat of the kiln, and the warmth of the hops, it is known to have arrived at a proper hight. An even steady fire is then continued for eight or ten hours, according to the state or circumstances of the hops, by which time the ends of the hop stalks become shriveled and dry, which is the chief sign by which to ascertain that the hops are properly and sufficiently dried. They are then taken off the kiln, and laid in a large room or left till they become quite cool; and they are now in condition to be put into bags.

"*To judge of the quality* of hops, as the chief virtue resides in the yellow powder contained in them, which is termed the condition, and is of an unctuous and clammy nature, the more or less clammy the sample appears to be, the value will be increased or diminished in the opinion of the buyer. To this may be added the color, which it is of very material consequence for the planter to preserve as bright as possible, since the purchaser will always insist much on this article; though perhaps the brightest colored hops are not always the strongest flavored." B.

The Bland Grape.

From the letter of a correspondent we present the following paragraph:

"The Bland grape when fully ripe, is equal in my estimation, to any *exotic* variety that I have tasted. In many situations in the Genesee Country however, it only ripens in favorable seasons; and this fall I had not one fit to eat, though the fruit had set well on the vines. But I ought to add that the aspect was not the best,—so I took up one root and planted it where it may receive the *reflected heat* and *shelter* from a board fence. In a land of sunshine the difference of climate between the north, and the south sides of such a fence or wall, is very great, as British horticulturists have long understood; and I allow myself to hope that this change will be sufficient to insure the maturing of this fine grape."

For the Genesee Farmer.

Gama* Grass.

Planters in the Southern States for several years past, have been turning their attention to the culture of a native grass which promises great advantages. It is said to have been "first found in the south west [from Mobile] and principally through the provinces of South America, where it is called by the Spaniards the *Gama Grass.*" Dr. *Hardeman* of Missouri appears to have been the first cultivator of this plant in the United States; but whether he found the seed there, or procured it from the Spaniards, I have no evidence to show. It is certain however, that it is a native of various parts of the Union. Along the sea coast it has been found as far north as Connecticut; and in the interior, on the Schuylkill 25 miles above Philadelphia, where I presume I have also seen it growing.

This grass has been long known to botanists under the name of *Tripsacum dactyloides* and *Tripsacum monostachyon*, which are found however, to be only *varieties* of the same *species*; but the knowledge that it was worthy of cultivation appears to have been derived from the Spanish Americans. One writer in North Carolina says, "I have had it in view as worthy the farmer's notice, these twenty years;" and another observes that "unless lands are enclosed, the grazing tribe will not permit it to rise into notice."

From the following remarks of *H. B. Croom*, a distinguished botanist of Newbern, N. C. we may understand something of the situation of our brethren to the south: "While the northern and western portions of our country are provided with a variety of valuable grasses, suited to their climate and soils, the alluvial [?] portions of the southern states are entirely destitute of these useful auxiliaries; for I believe that neither clover, timothy, herd's grass, orchard grass, nor any of those grasses derived from northern climates, have proved, nor ever will prove, extensively beneficial. The consequence is that *throughout this extensive portion of country no hay is made*; and the only native product relied on as provender for horses and other cattle, is, *the dried blades of Indian corn.* Hence the planter's [live] stock is generally stinted during winter, and the products of his dairy rendered extremely meagre: *butter, cheese, and even hay, are imported from the north.*"

A grass that will more than place them on an equality with us, must therefore be of immense importance. The same writer continues: "The zealous advocates of this grass have assured us that it will yield from seventy to ninety tons of *green* hay, or from twenty to thirty tons of *cured* hay to the acre. But if there should be any exaggeration in this, we may reduce the estimate *one-half*, and the produce will still remain ample enough to make its cultivation highly profitable. Ten tons of cured hay is equivalent to twenty-five ordinary stacks of our *fodder*, and thus the product of five acres of Gama grass, would equal one hundred and twenty-five stacks of corn fodder! which is *more than is obtained from three hundred acres of corn on common soils.*"

N. Herbemont of Columbia in South Carolina, well known as a valuable and scientific correspondent of the American Farmer, says, "The hay I have no doubt, will be found excellent. As to the amount of produce, it is most probable that the account which I have seen, stating that it would be about *three hundred thousand pounds of green grass to the acre*, the person that made it was rather too sanguine; but *there can be no doubt of its being the most productive and easily cultivated grass ever tried in this country.*"

Wm. B. Meares of Sampson county in North Carolina says, "Mr. *Magoffin** informs us he has actually made at the rate of ninety tons of *green* hay per acre in one year—equal to between twenty and thirty tons of *cured* hay. Dr. *Hardeman* states that a single root, covering a circle, the diameter of which was two feet, yielded at one cutting fifty-two pounds of green hay, which when dried weighed twenty pounds; and consequently that an acre of ground filled with roots equally productive, would yield more than two hundred and seventy tons of hay. However exorbitant these accounts may appear at first, the high standing of these gentlemen leaves no room to doubt their accuracy. My own experiments induce me to believe that *under circumstances in all regards favorable, they may be realized.*"

The following extracts are descriptive of the *habits* of this grass:—"They came up in a few days," says J. Magoffin, "and appeared in the form of *young oats.*" He transplanted them, and adds: "The rapidity of their growth astonished me, and I found by September each plant *a bunch of fine blades*—three and a half to four feet high."—It was "*a mass of blades rising from the roots, almost perpendicular*, exhibiting a most beautiful appearance of vegetable luxuriance."—"The leaves previous to the period of flowering all issue from the same root,—are of a deep green color, from two to three feet long, and from one to an inch and a half wide, shaped like a blade of fodder." "The flower stems shoot up from different parts of the bunch, and grow from three to seven feet high."—"When the seed is ripening on the end of the seed stalk, six to eight feet high, the mass of leaves appear to undergo no change" [but continue green.]

To show the rapidity of its growth, I make the extracts that follow: A leaf, *the growth of twelve days*, was sent to the Editor of the American Farmer, who says, "The blade of Gama grass enclosed in the letter measures thirty-two and a half inches in length." *J. Magoffin* remarks, "When all surrounding vegetation was literally burnt up [this grass] was green and flourishing; and during the month of July it grew forty-three inches."—"It was cut on the first day of every month, ranging from three and a half to four and a half feet in height." It grows well in both sandy and clayey soils.

In regard to its nutritious qualities the following testimony is selected: "Its taste resembles young corn blades—a taste of all others the most agreeable to animals. I found every thing was prodigiously fond of it, especially horses and cattle.—A distinguished farmer and iron-master, found on trial that his mules performed their work with plenty of this grass and salt, rendering the addition of *corn* unnecessary."—"When made into hay, it becomes of a singularly agreeable flavor."†—"I have fairly tested its value in the production of milk and butter. I cut at fifteen days growth when it exhibits peculiar delicacy, and fed two cows,—and perfectly in recollection of the fine butter of the Philadelphia *Jersey* market, I am assured it exceeds for delicacy the production of clover pastures, and fully equal in that *richness* peculiar to the fine butter of that market-house. This I had been informed would be the case by a Spanish gentleman, a native of those provinces of South America in which it abounds, and where it is so highly valued for its extraordinary nutritive properties in the support of the horse, mule, and ox."†

To the kindness of *Thomas S. Pleasants* of Beaverdam in Virginia, I am indebted for a small packet of the seed, and hope to be able to give it a fair trial in this northern climate. "It is probable," says *H. B. Croom*, "that this is one of the few valuable grasses that adapt themselves to every climate and every soil." D. T.

Greatfield, Cayuga county, 12 mo. 21, 1833.

For the Genesee Farmer.

Apples good for Cattle and Hogs.

When the article under this head at page 376, [vol. 3,] appeared, I intended to say something in approval of the policy recommended; and though Judge Buel has since taken a very correct and interesting view of the subject, he has not entirely superseded what I had to say. For more than twenty years, I have derived great benefits from feeding fruit to my live stock, particularly peaches and sweet apples to my hogs in the latter part of summer.

In 1819, I publicly proposed the planting of orchards for this especial purpose. The Bough apple was mentioned at that time as being *early*, but continuing long in season,—*sweet*; and an *annual* bearer. As it spreads less than many other kinds, I proposed one tree to every square rod, or one hundred and sixty trees to the acre. Such a lot would prevent the feeding out of a great deal of grain; and as it would require no care nor culture but fencing and keeping off the caterpillars, it would be a judicious application of capital.

I am far from being positive however, that the Bough apple is the best sort. There may be others better adapted to this purpose, although I cannot name such at present. I have one seedling, most of which has been cut away to make room for grafts set in its top, which is a very valuable apple for feeding cattle. It is so *small* as not to endanger them by *choking*; and it has been recommended to me to propagate the kind, partly on this account, and partly because it is a remarkably rich and sweet fruit. It bears abundantly every other year; but it is very probable that among many young trees, a part would bear one year, and the residue in the following year. Should this not happen however, it would be easy to pluck off all the blossoms from half the trees, while they were small and just beginning to bear, and which would doubtless change the season of their fruiting.

Apples, not requiring to be mashed for cattle, would save a great deal of labor; yet notwithstanding the labor, they are a very profitable food. In the summer of 1822, I first directed

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* "In honor of the Spanish gentleman who first introduced its culture into Mexico." H. B. C.

* Who first introduced its culture into Alabama.

* J. Magoffin in the American Farmer.

† J. Magoffin in the American Farmer, vol. 13, page 215.

mashed apples to be given to my milch cows, about four quarts to each, and the *increase* in the milk was nearly one third. My attention at that time was much occupied with other things, and I believe no experiments were made to ascertain if a greater quantity would have been preferable.

Some persons to whom I mentioned this practice, expressed great surprise, saying that they always understood that *apples dried up the milk of cows.* When I inquired how it had been discovered, I found the notion to originate from cattle accidentally breaking into orchards, where they gorged themselves till they were surfeited, which eventually induced fever. An argument equally cogent may be drawn against the use of grain, because cattle sometimes break into cornfields and become foundered.

I have regretted to see orchards cut down when the apples were not wanted for exportation or cider. A change in the tops of large trees may be readily made if judiciously attempted; and great economy in my opinion may yet be introduced in the food given to live stock.

A FARMER.

For the Genesee Farmer.

Highways---No. XV.

A few weeks since, we had a very deep snow, being nearly eighteen inches, although a part had melted on the soft ground. Our population chiefly consists of stirring people; and such a snow is the signal for going forth. Where the roads were much traveled, the sleighs were soon on the mud; and when it froze hard, there was too much bare ground, for any great improvement. A *drag* such as are used on turnpikes to to fill the ruts, or even a plank fastened diagonally on its edge, behind a sled, so as to project forward one or two feet into the snow, with a single team, for half a day would have made excellent sleighing, throughout any district in our town. But no provision of this kind has been made; no law has imposed such a duty on pathmasters; and so we had to travel on a walk most of the way, and be contented to take half a load

It is not often, I admit, that a *drag* would be wanted for this purpose; yet such cases occur; and in summer it would be eminently useful. After ruts have been made in rainy weather, and the roads begin to dry, it should be made to pass along, smoothing and returning the clotted earth to its place. If this was practiced, our roads would be twice as good as they now are,—for in the present state of things, a rut is never filled except by the dirt that is pushed, kicked, or thrown *accidentally* in, by the wheels of carriages, or the hoofs of horses or cattle.

Our Legislature at no distant period ought thoroughly to examine our present inefficient system for repairing roads; and I hope, among the prominent features of a new bill, that provisions for drags will be made to be employed whenever the state of the roads shall require them. The expense would be a trifle, and the improvement very important.

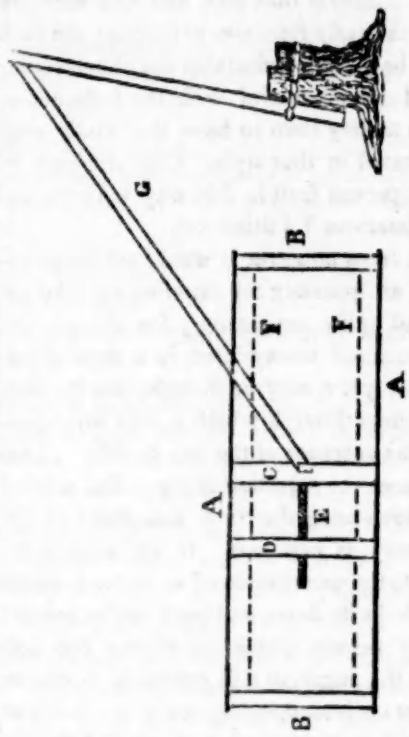
I wish your readers not to suppose however that I want to increase the road taxes. I am satisfied that the present amount, if properly expended, would keep them in a far better condition than we have been used to, throughout the year. A great deal of labor is annually misapplied; and if we cease to scrape into the roads, muck and sods, we can well afford to throw out the stones and fill the ruts. VIATOR.

For the Genesee Farmer.

Stump Extractor.

Agreeable to the request of your correspondent H. M. W., I give you a description of a Stump Extractor used on the Erie Canal for overturning trees and stumps and removing very heavy ones from the line of the canal. This machine possesses great power, is not expensive, requires but two men to operate it, and answers a good purpose where power is a greater requisite than expedition.

The following plan will give a tolerable idea of the machine.



A. A. The two sides of the machine, of scantling, 3 by 5 inches, 8 feet long.—B. B. Ends of the machine, 2 1-2 feet long, 6 by 9 inches.—C. Head block, 8 inches square.—D. Screw block, in which is inserted the box of the screw, 6 by 8 inches.—E. The screw, 2 1-2 inches in diameter, 2 1-2 or 3 feet long, such as used by Millers in raising mill-stones.

F. F. Two strong iron bars, 3 inches wide, 3-4 inch thick, passing through the head and screw blocks, and through the ends and strongly fastened, having holes one inch in diameter, once in 6 inches, the whole length of them.

G. The lever, from 12 to 16 feet in length, of very stiff timber.

The machine is laid on the ground 6 or 8 feet from the stump or tree, and fastened from receding; the head and screw blocks slipped back to the end fartherest from the stump. The lever placed on the head block and against the top of the stump, or if not high enough, chain a lever to the stump, against which place the lever from the head block, at an angle of about forty-five degrees. Then by turning the screw, the head block is pushed forward the length of the screw and fastened by pins passing through the iron bars—run back the screw and move up the screw block to the head block, and fasten it by pins inserted in the iron bars; shove the head block forward by turning the screw as before, and thus the tree or stump must gradually recline until it is overturned. The screw is turned by means of cast iron cog wheels, varying in size so as to give a rapid motion, and the wheels turned by two cranks. Two stout men are sufficient to overturn the largest trees. As every inch can be saved that is gained, the operation is perfectly safe, and gives the men an opportunity of rest as often as required.

I have here given your correspondent a description of a machine which I have used, and leave it to others to say which is the best.—It is not patented. Can be made by any carpenter. Will not cost over $25,00. Two or three large stumps would be a day's work for two men. The power is immense, overturning the largest trees and of the deepest root. Can scarcely get out of repair, and is easily moved any where by a horse or four men.

I have thus answered the questions of your correspondent, and if he or any of your readers should think proper to build such a machine, I will cheerfully give any further information which may be required. O. P. Q.

East Bloomfield, Dec 27, 1833.

For the Genesee Farmer.

Lime as a Manure in the Genesee Country.

I have no certain knowledge that lime has been used as a manure in this district. Its *apparent* effects would without doubt, be greatest in soils nearly destitute,or which only contained it in very small quantities; but it by no means follows that calcareous lands may not be greatly improved by additional supplies. I have had some opportunities to observe the extraordinary fertility of lands lying at the base of limestone ridges; and have been led to believe that though our farms are comparatively rich, they might very profitably be made richer by the application of lime.

Some farmers have held the notion that lime was not useful except when applied in its caustic state; but it is an error that ought to be corrected. Marl, which commonly contains about fifty per cent of calcareous matter, is never caustic. So that if the limstone be finely pulverized, its effects will be the same whether it has been *ground*, or *burnt*, or *disintegrated* by the weather; and the particles carried down from these rocks in heavy rains are found greatly to fertilize the lands below.

I remember an instance of this kind, in which a horizontal stratum of limestone, only a few feet in thickness, occurred on the side of a high hill. Below the rock, the land was remarkably fertile; and differed entirely in the luxuriance of its vegetation from the more unproductive soil above.

In making a valuation of some lands, a few years ago, in company with an old shrewd farmer who had become wealthy by employing his eyes as well as his hands, he remarked to me in reference to a small tract lying at the base of a calcareous ridge, "I would be willing to give a hundred dollars an acre for that land;"* and on conversing with the occupant, he said it never failed to produce extraordinary crops. It had a bluish cast like some kinds of marl, mixed with some vegetable matter.

On examining the more common soils of the Genesee Country, it may be discovered that they contain much less lime than either of the tracts referred to, and therefore it is probable that more lime might profitably enter into their composition.

I wish to guard however, against one error. The benefits of manure may not always be properly appreciated. An increase of ten bushels of corn to the acre, might escape notice when the unmanured parts of the field produced at the rate of forty bushels; while an increase from fifteen to twenty-five bushels would attract the attention

* When other lands were worth from twenty-five to thirty dollars an acre.

of a careless observer. Yet in both cases, the effect of the manure has been equal, and the result precisely the same. Rich lands may often be as profitably manured as poor lands.

New countries have generally been settled by persons who never inquired whether the lands were calcareous or not. In a state of nature, there is little to indicate to the uninstructed that some lands under culture will be more durably fertile than others. A thrifty growth of timber is often found on silicious soils, not well adapted to heavy crops of grass or grain; and many of our wild plants grow luxuriantly, and seem to require nothing more than vegetable earth. Yet from these two circumstances, many a new settler judges of the quality of land. The ax however cuts off the supply of leaves; the plough and the harrow expose the muck to a new action of the elements; and in a few years under the operation of severe cropping, the dark color and the fertility of the soil disappear together. The proprietor discovers that his farm is not worth half as much as some neighbor's who was so fortunate or so skillful as to settle on limestone* land. In some of the old settlements of the United States there is a difference of more than three to one in the value of such farms; and I account for this difference by the circumstance that calcareous matter is commonly diffused through the soil in the vicinity of lime-rocks.

In a limestone district in England, the rock in "no part adheres firmly," says a late writer, "but separates into small shattery fragments when struck. This substance we burn in very large quantities for building purposes, and *for manure*, which by the facility which we have of obtaining small coal, is rendered at the low rate of *three pence a bushel* † at the kiln. Our farmers availing themselves of this cheap article, use considerable quantities, composted with earth, for their different crops, at the rate of not less than one hundred bushels to the acre. This is a favorite substance for their potatoe land. The return in general is not so large as when grown in manure from the yard; but the root is said to be more mealy and better flavored." A F*****.

For the Genesee Farmer.

Expelling Caterpillars.

I should greatly rejoice if something could be invented to drive caterpillars and other insects from our trees without so much manual exercise; but so far, I believe all the ingenuity of horticulturists, has been put in requisition to little purpose. There was a time when hopes were entertained, that one discharge of an electrical battery, would instantly clear every tree in the orchard. Another plan was to dose them with sulphur; and several persons of high character came forward to announce the success of their experiments. Some other persons as well as myself, however repeated these experiments but we came to a very different conclusion, believing that one cause had been mistaken for another; and if any reader wishes to refer to my reasons, they may be found in the second volume of this journal.

At page 381,‡ I observe the report of a scheme for expelling insects with mercury which we might think would be more effectual than sulphur; but it is not new; and in consequence of having seen a notice in the newspapers, I tried the experiment with blue mercurial ointment more than ten years ago. The caterpillars were not disturbed in the least.

It has been recorded that in a garden in England, the leaves of a shrub were found to exsude fine globules of mercury in consequence of an apothecary having been formerly in the practice of emptying his vessels on the spot; and many years ago Dr. Mitchill received from Dr. Foote, a salt peach,* resulting from a quantity of brine which had been poured down near the root of the tree. These cases show that extraneous matters may circulate with the sap of plants; and there is reason to conclude that both salt and mercury would be sufficiently repulsive to insects; but such fruit would be neither delectable nor wholesome; and I would rather contend with the little depredators for a moiety than to have the whole crop when medicated in that style. Can mercury be employed to protect fruit in this way without rendering it deleterious? I think not.

On shade trees however it would not be so objectionable; and possibly my experiments may not be considered quite conclusive; for though the mercury remained unoxydated, in a state of minute division; yet it may be thought that the unctuous substances through which it was interspersed, closed the entrance of the sap vessels. I am willing to meet the objection fairly. But while I do this, I have strong doubts if that mode of applying mercury, is judicious. If we wish to introduce it into the constitution of an animal, would we cut a hole in its flesh, and pour in the metal? Are the sap vessels which have been cut and mangled by the auger, in a fit condition to absorb it? Does not such an opening made in a birch or a maple at the flowing season, immediately discharge the sap from the ruptured vessels, instead of showing any disposition for absorption? and every child knows a similar consequence follows the least wound in his foot or finger. No doubt but mercury and sulphur may be carried into the circulation of both plants and animals; but to effect this purpose, I would apply them to the roots of the former, and to the stomach or absorbents of the latter. A Practical Gardener.

For the Genesee Farmer.

Dutch and Durham Short Horns.

Mr. L. Tucker—I noticed in your report of the Agricultural Exhibition in October last, that my cattle were denominated *Dutch*. Thinking it of no particular consequence to myself, I made no comment upon it; but from a communication in your paper of the 14th instant, under the head of "Improved Cattle," over the signature of "R." I am induced to give you their history. They are a cross of the Dutch Short Horn with the Durham Short Horn. The Dutch blood is derived from stock imported by Consul Jarvis of Vermont. The Durham from Wye Comet, the celebrated bull imported by Mr. Powell of Philadelphia. The Dutch Short Horns not being so generally known as the Durham, I would remark that Mr. Jarvis, after twenty years experience upon the subject, thinks they cannot be improved by any cross, or any breed of cattle, and continues to keep the blood distinct.

The friend through whom I obtained them, thought a cross with the Durham would be an improvement—of the result the public can judge. For working cattle and beef they are not exceeded, I think, by any. They are good milkers, and more hardy than our native cattle.

The very favorable reception they met with at the Agricultural Exhibition may also be named as an object for this notice of their origin, and those wishing to improve their stock of cattle may feel satisfied as to the blood.

Your ob't serv't, H. HOOKER.

North Rochester, Dec. 27, 1833.

For the Genesee Farmer.

An Address to the Patrons and

Readers of the Genesee Farmer.

Having supplied, for the first numbers of the second and third volumes of the Farmer, articles commendatory of the work, I now offer a similar contribution for the fourth volume, commencing with this number. I desire, once more at least, at the commencement of a new volume of this pre-eminently useful periodical, occurring as it does at the commencement of the year, to present to its patrons and readers an affectionate address. The Genesee Farmer, as a journal happily adapted to the use of agriculture and its kindred arts, especially in this section of the country, stands high in my estimation.

There are, I am glad to say, edited in other and remote parts of the country, devoted also to the same use, other journals deserving of great commendation. In their respective provinces they are acting well their parts, and as coadjutors with the Genesee Farmer, executing an agency highly beneficial to the country. I wish them great success, and a patronage increased a hundred fold. Certainly, I mean to detract nothing from their justly acquired merits when I say, that the Genesee Farmer, as a medium of interesting correspondence, and vehicle of useful intelligence, is second to none of its kindred journals.

From the early existence of this journal I have, as many of its readers well know, taken a deep interest in its favor. I have done so because I felt a conviction that an agricultural periodical was greatly needed in Western New-York, and could not, if patronized, fail of becoming extensively useful. That such have already been the results, and that too to an extent far beyond my anticipations, I am now fully satisfied. I continue, therefore, with the utmost cordiality, to recommend to my fellow-citizens, scarcely excepting any, the use and patronage of this paper. There is, probably, no other periodical, devoted to secular concerns, that can be so useful to them.

As to myself, I do not expect that the Genesee Farmer, or any other agricultural journal, how much soever the perusal of it may amuse and instruct me, will contribute in the least to the advancement of my interest. Indeed, drawing near as I do to the age of three score years and ten, broken by infirmities of body, and bending under the weight of years, I have done with the practice of agriculture. Yet it affords me great satisfaction to read the Genesee Farmer, and other agricultural journals. The only use that I expect to make of the knowledge I may thus acquire, is to impart it to my fellow-citizens for their advantage. This, I am happy to say, it delights me to do.

I have been in the habit of reading agricultural journals about fifteen years; and I am conscious that, while a practical farmer and business man, I derived great advantages from them in point of interest. I cannot doubt that I became a more consistent, systematic, and successful farmer than I could have been without their aid. But unfortunately, the best part of my life has

* There are soils, appearing to be perpetually fertile, which owe this quality to other minerals; but these tracts are rare.

† Equal to *five pence and one third*, New York Currency, or a little more than *five cents and a half*.

‡ Vol. 3.

* See Gen. Far. Vol. 3, p. 416.

passed before I had the benefit of such lights. The present generation of farmers little know how to appreciate their advantages; and many of them, it may be found, will despise and neglect their birthright.

I have it in my heart to offer now, to the readers of the Farmer, a few practical suggestions, and these they are permitted to receive as lessons of advice, dictated by an affectionate father.

1st. Continue, by all means, to take the Genesee Farmer, or take some agricultural journal; and while doing this, prevail on as many others as you can to do the like. The use of the Farmer cannot fail of benefiting yourselves very materially; and beyond a doubt it is executing an agency highly beneficial to this section of the country. I ask you to account for the unparalleled thrift now every where to be witnessed in the condition of farmers. This happy state of things is no doubt attributable to various causes, but I apprehend to none more so than the temperance reform, and the general circulation of agricultural journals. That the Genesee Farmer and its coadjutors, as the instruments of improving agriculture, have been executing an agency far more extensively useful than is generally supposed, I have not the least doubt.

2d. I advise you to read the Farmer more attentively than I have reason to apprehend many do. I find, in conversation with gentlemen who take this paper, that some of them have very little knowledge of its contents. Some indeed have confessed, that they scarcely read the paper at all, especially in seasons of business pressure. This is wrong. For practicing in a manner so slack, in relation to this concern, I scarcely know what apology can be offered that should be deemed satisfactory. It appears to me that the Farmer, coming to you as it does weekly, on a message of benevolence and patriotism, merits a more polite and respectful regard. Its patrons should, under any circumstances, give to it sufficient attention to make themselves acquainted with at least the most valuable portions of its contents. With proper attention to the economy of time, in connection with systematic order, the performance of this service will rarely be found to interfere with the claims of business. Be assured that, so far from hindering the progress of your business, the regular perusal of this journal will continually serve to give it a happy direction, and emulate its movements.

If you have children, especially sons, intended for the employment of husbandry, encourage them, even in quite early life, to read this journal, and to read it attentively as a text-book. Let them, from time to time, rehearse to you the most interesting portions of its contents. This will contribute to the improvement of your own minds, and lead your children to such habits of mental application, and the certain attainment of such knowledge as will be of incalculable use to them, and of greater worth than any other patrimony they can receive from you.

3d. Come fully over to the cause of agriculture, and, by all practicable and prudent means, encourage its improvement. I do not ask you to become fanatics, in the theory or practice of this art. You know that farmers are accused, (how justly I leave it for you to say,) of being illiberal, averse to improvements in their art, obstinately attached to ancient usages and customs, and oftentimes, through ignorance, actively employed in opposing their own interest. Of the readers of agricultural journals, better things and more liberal things are expected.

Agriculture unquestionably admits of improvement to an inconceivable extent. Happily a spirit of agricultural enterprise, having slumbered for ages, begins to awake in our own beloved state. In the counsels of liberal and patriotic minds have recently originated two projects, the execution of which, it is believed, will have a salutary bearing on the best interests of the community. I speak here of the two propositions, 1st, to institute and endow, at the expense of the state, an agricultural seminary; 2d, to institute a state agricultural society, with county auxiliaries, the whole to be sustained, or chiefly so, by state bounty. My limits will not allow me to argue here the merits of these patriotic projects. All I can do now is only to say, that, having bestowed much thought upon the subject, I am satisfied that both projects combined propose nothing more for the use of agriculture than her interests justly claim. And who needs to be informed, that with the interest of agriculture, every other interest is essentially identified? I see nothing in either of these projects, or in them both, that looks at all visionary or extravagant. The truth is, the times of ignorance that could be winked at are gone by. It is not so now, neither will it ever be so again, as it was in former times, when muscular strength was chiefly relied on for agricultural achievements. The energies of the mind are *now* called for. To these agriculture finds that she has claims; and she will not be content until they are pressed into her service. Hence the use and importance of agricultural seminaries.

I am aware that we have among us farmers, and I am compelled to say some respectable farmers, who are yet fettered with prejudices against innovations for the improvement of agriculture. Of course they stand ready to oppose any thing and every thing that may be proposed as the means of agricultural improvement. Regardless of the Apostolic injunction, "do thyself no harm," they frequently act a part entirely at variance with their own interest. I am glad that the number of these men is now small, and daily lessening. Under the lights of the present day, there are not many who dare hazard their reputation by caviling against agricultural societies and other institutions for the improvement of agriculture.

4th. Encourage within the towns and districts of your respective abodes the culture of silk. This subject has for some time been before the public, yet I doubt whether its merits are generally understood and justly appreciated. So far as I can see, it presents strong claims to the attention of our citizens. It is of such a nature as to admit of being happily appended to other business of almost any sort. Farmers should institute mulberry plantations. This they should do without hesitation and without delay. It may be doubted whether there is any other business to which the inhabitants of this country, at least many of them, can turn their attention with brighter prospects of a sure and ample reward for their industry, than the culture of silk. It should be considered that this business is needed as a substitute for carding, hatcheling, spinning and weaving, which formerly supplied employment for our daughters and other domestics. It should be considered too, that this business is susceptible of becoming a cheap and easy means of improving the condition of almost every family. More easpecially, it claims your benevolent regards as a means happily adapted to the relief of the poor. Supply the poor in your respective vicinities with mulberry foliage, and encourage them to operate. You ought also, as patriotic citizens, to use your influence for the speedy introduction of the silk business at the public houses of pauperism within your respective counties. These habitations of misfortune are doubtless to become silk factories. Do what you can to hasten events so greatly to be desired.

5th. I commend to your favorable regard the Temperance Reform. Thankful ought every citizen to be, that an unlooked for message, as from the court of Heaven, has been received, announcing the fact, that ardent spirits, as a beverage, or as a means of giving health, strength and vigor to the animal frame, is altogether unnecessary. What tongue can depict the mischiefs that have resulted from such use? Brother farmers, if my limits would permit, gladly would I expostulate with you on this subject. Let me tell you, (for on this subject I can speak from my own experience,) that the use of strong drink, in connection with your business, is detrimental to your interest. Among the signs of the times, presaging better days for the present and future generations, none is so full of promise, none shines with a luster so bright, as the temperance reform. With the success of the warfare now happily waged against the monster Alcohol, the best interest of your country—your own dearest interest—that also of your children and children's children, are identified. What need I say more? To the respected gentlemen whom I have been addressing, many of whom I have not seen, neither shall see, on this footstool of God, I now wish a happy new year.

DAN BRADLEY.

Marcellus, December 26, 1833.

Receipt for Boiling a Tongue.

A lady has handed us a receipt from the *Cook's Own Book* which she thinks ought to be better known. It follows:

"A tongue is so hard, whether prepared by drying or pickling, that it requires much more cooking than a ham; nothing of its weight takes so long to dress it properly.

"A tongue that has been salted and dried should be put to soak,—if it is old and very hard,—24 hours before it is wanted, in plenty of water; a green one fresh from the pickle requires soaking only a few hours: put your tongue into plenty of *cold water;* let it be an hour gradually warming; and give it from three and a half to four hours very slow simmering, according to the size.

"Obs. When you choose a tongue, endeavor to learn how long it has been dried or pickled: pick out the plumpest, and that which has the smoothest skin, which denotes its being young and tender."

PRICES CURRENT.

ARTICLES.	PER	*Jan.* 4. ROCHESTER.	*Dec.* 28. NEW-YORK.
Ashes—Pot....	100lbs.	$3,75 *a* 0,00	$0,00 *a* 4,40
—— Pearl..	.....	4,00 *a* 4,25	4,90
Beeswax, yellow	lb.	0,20 *a* 0,22	18 *a* 20
Candles, mould	.....	0,10½*a*0,11	12 .*a* 13
—— dipped.	.....	0,10*a*0,10½	10½ *a*11½
Cloverseed.....	.....	.....	12..*a*.13
Flax, American.	.....	.....	9..*a*.11
Flax seed, clean	tierce	9,00*a*10,00	15,90
Flour, Western.	barrel	4,50 *a* 5,00	5,56 *a*5,75
Grain, Wheat..	bushel	0,87½.....	1,12
—— Rye....	.....	0,62.....	67
—— Oats...	.....	0,25.....	38
—— Corn...	.....	0,50.....	50..*a*..66
—— Barley..	.....	0,50..*a*..56	.....
Hemp, Americ'n	ton	.....	1,30 *a* 1,59
Hops, 1st sort..	lb.	.....	24..*a*..25
Plaster Paris...	ton	6,00 *a* 0,00	4,25
Beef, Mess....	barrel	0,00 *a*10,00	8,50 *a* 9,59
—— Prime....	.....	0,00 *a* 8,00	5,50 *a* 6,00
Pork, Mess....	.....	15,00	14,50*a*15,00
—— Prime....	.....	11,00	10,50*a*11,25
—— in the hog.	100lbs.	4,50 *a* 5,50	.....
Hog's Lard....	.....	8,00 *a* 9,00	8,00*a*10,00
Tallow.....	.....	7,50 *a* 8,00	8,00.....
Hay.....	ton	8,00 *a* 9,00	.....
Apples.....	bushel	25..*a*..50	.....
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ASA ROWE

Improvement of the Mind.

We design hereafter to devote a portion of our last page to extracts and communications calculated to excite a taste for scientific knowledge, and to aid in its diffusion. We select our introductory article from the recently published essays of Dr. Dick.

ON THE PLEASURES AND ENJOYMENTS CONNECTED WITH THE PURSUITS OF SCIENCE.

Man is a compound being; his nature consists of two essential parts, body and mind. Each of these parts of the human constitution has its peculiar uses, and is susceptible of peculiar gratifications. The body is furnished with external senses, which are both the sources of pleasure and the inlets of knowledge; and the Creator has furnished the universe with objects fitted for their exercise and gratification. While these pleasures are directed by the dictates of reason, and confined within the limits prescribed by the Divine law, they are so far from being unlawful, that in the enjoyment of them we fulfil one of the purposes for which our Creator brought us into existence. But the pursuit of sensitive pleasures is not the ultimate end of our being; we enjoy such gratifications in common with the inferior animals; and in so far as we rest in them as our chief good, we pour contempt on our intellectual nature, and degrade ourselves nearly to the level of the beasts that perish.

Man is endowed with intellectual powers, as well as with organs of sensation,—with faculties of a higher order, and which admit of more varied and sublime gratifications, than those which the senses can produce. By these faculties we are chiefly distinguished from the lower orders of animated existence; in the proper exercise and direction of them, we experience the highest and most refined enjoyments of which our nature is susceptible, and are gradually prepared for the employments of that immortal existence to which we are destined. The corporeal senses were bestowed chiefly in subserviency to the powers of intellect, and to supply materials for thought and contemplation; and the pleasures peculiar to our intellectual nature, rise as high above mere sensitive enjoyments, as the rank of man stands in the scale of existence above that of the fowls of the air, or the beasts of the forest. Such pleasures are pure and refined; they are congenial to the character of a rational being; they are more permanent than mere sensitive enjoyments; they can be enjoyed when worldly comforts are withdrawn, and when sensual gratifications can afford no delight; they afford solace in the hours of retirement from the bustle of business, and consolation amid the calamities and afflictions to which humanity is exposed; and the more we acquire a relish for such pleasures, the better shall we be prepared for associating with intelligences of a higher order in the future world.

THE IGNORANT MAN.

Before proceeding to the more particular illustration of this topic, let us consider the state and enjoyments of the man whose mind is shrouded in ignorance. He grows up to manhood like a vegetable, or like one of the lower animals that are fed and nourished for the slaughter. He exerts his physical powers, because such exertion is necessary for his subsistence; were it otherwise, we should most frequently find him dosing over the fire, or basking in the sun, with a gaze as dull and stupid as his ox, regardless of every thing but the gratification of his appetites. He has perhaps been taught the art of reading, but has never applied it to the acquisition of knowledge. His views are chiefly confined to the objects immediately around him, and to the daily avocations in which he is employed. His knowledge of society is circumscribed within the limits of his parish, and his views of the world in which he dwells are confined within the range of the country in which he resides, or the blue hills which skirt his horizon. Of the aspects of the globe in other countries—of the various tribes with which they are peopled—of the seas and rivers, continents and islands which diversify the landscape of the earth—of the numerous orders of animated beings which people the ocean, the atmosphere, and the land,—of the revolutions of nations, and the events which have taken place in the history of the world, he has almost as little conception as the animals that range the forest, or bound through the lawns. In regard to the boundless regions that lie beyond him in the firmanent, and the bodies that roll there in magnificent grandeur, he has the most confused and inaccurate ideas; and he seldom troubles himself with inquiries in relation to such subjects. Whether the stars be great or small, whether they be near us or at a distance, or whether they move or stand still, is to him a matter of trivial importance. If the sun give him light by day, and the moon by night, and the clouds distil their watery treasures upon his parched fields, he is contented, and leaves all such inquiries and investigations to those who have little else to engage their attention. He views the canopy of heaven as merely a ceiling to our earthly habitation, and the starry orbs as only so many luminous studs or tapers to diversify its aspect, and to afford a glimmering light to the benighted traveler. Of the discoveries which have been made in the physical sciences in ages past, of the wonders of creation which they have unfolded to view, of the instruments which have been invented for exploring the universe, and of the improvements which are now going forward in every department of science and art, and the prospects they are opening to our view, he is almost as entirely ignorant as if he had been fixed under the frozen pole, or chained to the surface of a distant planet. He considers learning as consisting chiefly in the knowledge of grammar, Greek, and Latin; and philosophy and astronomy as the arts of telling fortunes and predicting the state of the weather; and experimental chimistry, as allied to the arts of magic and necromancy. He has no idea of the manner in which the understanding may be enlightened and expanded, he has no relish for intellectual pursuits, and no conception of the pleasures they afford; and he sets no value on knowledge but in so far as it may tend to increase his riches and his sensual gratifications. He has no desire for making improvements in his trade or domestic arrangements, and gives no countenance to those useful inventions and public improvements which are devised by others. He sets himself against every innovation, whether religious, political, mechanical, or agricultural, and is determined to abide by the "good old customs" of his forefathers, however irrational and absurd. Were it dependent upon him, the moral world would stand still, as the material world was supposed to do in former times; all useful inventions and improvements would cease, existing evils would never be remedied, ignorance and superstition would universally prevail, the human mind would be arrested in its progress to perfection, and man would never arrive at the true dignity of his intellectual nature.

It is evident that such an individual (and the world contains thousands and millions of such characters) can never have his mind elevated to those sublime objects and contemplations which ehrapture the man of science, nor feel those pure and exquisite pleasures, which cultivated minds so frequently experience; nor can he form those lofty and expansive ideas of the Deity which the grandeur and magnificence of his works are calculated to inspire. He is left as a prey to all those foolish notions and vain alarms which are engendered by ignorance and superstition; and he swallows, without the least hesitation, all the absurdities and childish tales, respecting witches, hobgoblins, specters, and apparitions, which have been handed down to him by his forefathers in former generations. And while he thus gorges his mind with fooleries and absurdities, he spurns at the discoveries of science as impositions on the credulity of mankind, and contrary to reason and common sense. That the sun is a million of times larger than the earth, that light flies from his body at the rate of two hundred thousand miles in a moment of time, and that the earth is whirling round its axis from day to day, with a velocity of a thousand miles every hour, are regarded by him as notions far more improbable and extravagant than the story of the "Wonderful Lamp," and all the other tales of the "Arabian Nights' Entertainments." In his hours of leisure from his daily avocations, his thoughts either run wild among the most groveling objects, or sink into sensuality or inanity, and solitude and retirement present no charms to his vacant mind. While human beings are thus immersed in ignorance, destitute of rational ideas, and of a solid substratum of thought, they can never experience those pleasures and enjoyments which flow from the exercise of the understanding, and which correspond to the dignity of a rational and immortal nature.

THE LEARNED MAN.

On the other hand, the man whose mind is irradiated with the light of substantial science has views, and feelings, and exquisite enjoyments to which the former is an entire stanger. In consequence of the numerous and multifarious ideas he has acquired, he is introduced, as it were, into a new world, where he is entertained with scenes, objects, and movements, of which a mind enveloped in ignorance can form no conception. He can trace back the stream of time to its commencement; and, gliding along its downward course, can survey the most memorable events which have happened in every part of its progress from the primeval ages to the present day—the rise of empires, the fall of kings, the revolutions of nations, the battles of warriors, and the important events which have followed in their train—the progress of civilization, and of arts and sciences—the judgments which have been inflicted on wicked nations—the dawnings of Divine mercy towards our fallen race—the manifestation of the Son of God in our nature—the physical changes and revolutions which have taken place in the constitution of our globe—in short, the whole of the leading events in the chain of Divine dispensation from the beginning of the world to the period in which we live. With his mental eye he can survey the terraqueous globe in all its variety of aspects; contemplate the continents, islands, and oceans which compose its exterior, the numerous rivers by which it is indented, the lofty ranges of mountains which diversify its surface, its winding caverns, its forests, lakes, sandy deserts, ice-islands, whirlpools, boiling springs, glaciers, sulphuric mountains, bituminous lakes, and the states and empires into which it is distributed, the tides and currents of the ocean, the icebergs of the polar regions, and the verdant scenes of the torrid zone. He can climb, in imagination, to the summit of the flaming volcano, listen to its subterraneous bellowings, behold its lava bursting from its mouths, and rolling down its sides like a flaming river—descend into the subterranean grotto—survey, from the top of the Andes, the lightnings flashing and the thunders rolling far beneath him,—stand on the brink of the dashing cataract and listen to its roarings—contemplate the ocean rearing its billows in a storm, and the hurricane and tornado tearing up forests by their roots, and tossing them about as stubble. Sitting at his fireside, during the blasts of winter, he can survey the numerous tribes of mankind scattered over the various climates of the earth, and entertain himself with views of their manners, customs, religion, laws, trade, manufactures, marriage ceremonies, civil and ecclesiastical governments, arts, sciences, cities, towns and villages, and the animals peculiar to every region. In his rural walks he can not only appreciate the beneficence of Nature, and the beauties and harmonies of the vegetable kingdom, in their exterior aspect, but can also penetrate into the hidden processes which are going on in the roots, trunks and leaves of plants and flowers, and contemplate the numerous vessels through which the sap is flowing from their roots through their trunks and branches, the millions of pores through which their odoriferous effluvia exhale, their fine and delicate texture, their microscopical beauties, their orders, genera, and species, and their uses in the economy of nature.

(To be continued.)